## OBITUARY NOTICES.

Henry Edward Armstrong, Ph.D., LL.D., F.R.S., Hon. F.R.S.E.

HENRY EDWARD ARMSTRONG, who was elected an Honorary Fellow in 1934, died on July 13, 1937, in his ninetieth year. Although his connection with our Society was brief, he had been a Fellow of the Chemical Society since 1870 and of the Royal Society of London since 1876. For many years, indeed, he had been recognised as the "grand old man" of British Chemistry.

He first studied chemistry under Hoffmann at the Royal College of Chemistry in 1865; Tyndall and Huxley were also his scientific instructors. In 1868 he left the private laboratory of Frankland to obtain his Ph.D. degree with Kolbe at Leipzig. He inherited there Kolbe's gift of provocative criticism, for the skilful employment of which he will always be remembered.

There followed a long teaching and research career at the London Institution, Finsbury Square, and at the City and Guilds College, South Kensington. As a teacher, Armstrong was characteristically unorthodox, and he disturbed his complacent colleagues for decades by his constant advocacy of what became known as the "neuristic method" of presenting science experimentally in schools, as opposed to the traditional "didactic method." In research Armstrong was pre-eminent in organic chemistry, and his inspiration is evident by the large number of research students who worked under his direction and later became leaders in chemical industry or education.

As a controversialist, Armstrong knew no equal. For fifty years he never ceased to attack the Arrhenius theory of ionization in solution with almost religious fervour. He had himself carried out a most extensive study of the physical properties of sulphuric acid just before the ionic hypothesis came into prominence, and his communications frequently read as if he were still dipping his pen into that liquid. Never, however, was there any personal rancour in his polemics; he could be just as genial in conversation as vituperative in writing.

There can be no doubt that as *laudator temporis acti* he frequently failed to appreciate the significance of new lines of chemical advance, but there can also be no doubt that he frequently acted as a most efficient and salutary brake on over-fanciful speculations.

J. K.